Inflammation

When your body activates your immune system, it sends out inflammatory cells. These cells attack bacteria or heal damaged tissue. If your body sends out inflammatory cells when you are not sick or injured, you may have chronic inflammation. Inflammation is a symptom of many chronic diseases, such as arthritis or Alzheimer’s disease.

What is inflammation?

When your body encounters an offending agent (like viruses, bacteria or toxic chemicals) or suffers an injury, it activates your immune system. Your immune system sends out its first responders: inflammatory cells and cytokines (substances that stimulate more inflammatory cells).

These cells begin an inflammatory response to trap bacteria and other offending agents or start healing injured tissue. The result can be pain, swelling, bruising or redness. But inflammation also affects body systems you can’t see.

What is the difference between acute inflammation and chronic inflammation?

There are two types of inflammation:

Acute inflammation: The response to sudden body damage, such as cutting your finger. To heal the cut, your body sends inflammatory cells to the injury. These cells start the healing process.

Chronic inflammation: Your body continues sending inflammatory cells even when there is no outside danger. For example, in rheumatoid arthritis inflammatory cells and substances attack joint tissues leading to an inflammation that comes and goes and can cause severe damage to joints with pain and deformities.

What are the symptoms of acute and chronic inflammation?

Acute inflammation may cause:

Flushed skin at the site of the injury.

Pain or tenderness.

Swelling.

Heat.

Chronic inflammation symptoms may be harder to spot than acute inflammation symptoms. Signs of chronic inflammation can include:

Abdominal pain.

Chest pain.

Fatigue.

Fever.

Joint pain or stiffness. (example: rheumatoid arthritis)

Mouth sores.

Skin rash. (example: psoriasis or acne)

What conditions are associated with chronic inflammation?

Chronic inflammation is involved in the disease process of many conditions, including:

Alzheimer’s disease.

Asthma.

Cancer.

Heart disease.

Rheumatoid arthritis (RA) and ankylosing spondylitis (AS).

Type 2 diabetes.

What are the most common causes of inflammation?

The most common reasons for chronic inflammation include:

Autoimmune disorders, such as lupus, where your body attacks healthy tissue.

Exposure to toxins, like pollution or industrial chemicals.

Untreated acute inflammation, such as from an infection or injury.

Some lifestyle factors also contribute to inflammation in the body. You may be more likely to develop chronic inflammation if you:

Drink alcohol in excess.

Have a high body mass index (BMI) that falls within the ranges for obesity, unless that is a result of being very muscular.

Exercise at your maximum intensity too frequently, or you don’t exercise enough.

Experience chronic stress.

Smoking